

Appl. No. 09/097,023

Response AF dated January 14, 2005

Reply to Final Office Action of November 16, 2004

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (previously presented) A catheter section comprising an elongate tubular member having a proximal end, a distal end, and a passageway defining a lumen extending between the proximal and distal ends, said elongate tubular member comprising a knit tubular member and an inner tubular liner in coaxial relationship with the knit tubular member, wherein the knit tubular member is formed from a plurality of interlocking up loops and down loops and is generally not radially expandable.
2. (original) The catheter section of claim 1 wherein the knit tubular member comprises a metal alloy.
3. (original) The catheter section of claim 1 wherein the knit tubular member comprises a superelastic alloy.
4. (original) The catheter section of claim 3 wherein the superelastic alloy is a nickel-titanium alloy.
5. (original) The catheter section of claim 3 wherein the superelastic alloy is nitinol.
6. (original) The catheter section of claim 1 wherein the knit tubular member comprises stainless steel.
7. (original) The catheter section of claim 1 wherein the knit tubular member comprises a platinum alloy.

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8. (original) The catheter section of claim 1 wherein the knit tubular member comprises a non-metallic material.

9. (original) The catheter section of claim 8 wherein the non-metallic material is a polymeric material.

10. (previously presented) The catheter section of claim 1 wherein the knit tubular member comprises a multifilament wire.

11. (original) The catheter section of claim 10 wherein the multifilament wire comprises stainless steel and platinum.

12. (original) The catheter section of claim 10 wherein the multifilament wire comprises material selected from the group consisting of stainless steel, platinum, and nitinol.

13. (original) The catheter section of claim 1 wherein the knit tubular member is formed from wire having a generally circular cross-sectional shape.

14. (original) The catheter section of claim 13 wherein the wire has a diameter of about 0.3 mil - 1.5 mil.

15. (original) The catheter section of claim 1 wherein the knit tubular member comprises a first strand made from a first material and a second strand made from a second material.

16. (cancelled)

17. (previously presented) The catheter section of claim 54 wherein the outer tubular cover comprises a material selected from the group consisting of polyimide, polyamide, polyethylene, polypropylene, polyvinylchloride, fluoropolymers including PTFE, FEP, Nylon,

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polyether block amide, vinylidene fluoride, and their mixtures, alloys, copolymers, and block copolymers.

18. (previously presented) The catheter section of claim 54 wherein the outer tubular cover comprises a polymer which can be heat-shrunk onto the knit tubular member.

19. (previously presented) The catheter section of claim 54 wherein the outer tubular cover is extruded onto the knit tubular member.

20. (previously presented) The catheter section of claim 54 wherein the outer tubular cover is bonded onto the knit tubular member.

21. (previously presented) The catheter section of claim 54 wherein at least one of the inner tubular liner and the outer tubular cover are radiopaque.

22. (previously presented) The catheter section of claim 1 wherein the inner tubular liner comprises a material selected from the group consisting of polyethylene, fluoropolymer, Nylon, polyether block amide, polyvinyl chloride (PVC), ethyl vinyl acetate (EVA), polyethylene terephthalate (PET), and their mixtures, alloys, and copolymers.

23. (cancelled)

24. (previously presented) A catheter section comprising an elongate tubular member having a proximal end, a distal end, and a passageway defining a lumen extending between the proximal and distal ends, said elongate tubular member comprising an inner liner, an outer cover, and a knit tubular member formed from a metal wire forming a plurality of interlocking up loops and down loops, wherein the knit tubular member is generally not radially expandable.

25. (original) The catheter section of claim 24 wherein the metal wire comprises a superelastic alloy.

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26. (original) The catheter section of claim 25 wherein the superelastic alloy is nitinol.

27. (original) The catheter section of claim 24 wherein the metal wire has a generally circular cross-section.

28. (original) The catheter section of claim 24 wherein the metal wire is a multifilament wire.

29. (original) The catheter section of claim 28 wherein the multifilament wire comprises stainless steel and platinum.

30. (original) The catheter section of claim 28 wherein the multifilament wire comprises material selected from the group consisting of stainless steel, platinum, and nitinol.

31. (previously presented) A catheter comprising an elongate tubular member having a proximal end, a distal end, and a passageway defining a lumen extending between those ends, said elongate tubular member comprising:

a relatively stiff proximal segment; and

a relatively flexible distal segment comprising a knit tubular member and an inner tubular liner in coaxial relationship with the knit tubular member, wherein the knit tubular member is formed from a plurality of interlocking up loops and down loops and is generally not radially expandable.

32. (original) The catheter of claim 31 wherein the knit tubular member comprises a superelastic alloy.

33. (original) The catheter of claim 32 wherein the superelastic alloy is nitinol.

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34. (original) The catheter of claim 31 wherein the knit tubular member comprises stainless steel.

35. (original) The catheter of claim 31 wherein the knit tubular member comprises a platinum alloy.

36. (original) The catheter of claim 31 wherein the knit tubular member comprises a non-metallic material.

37. (original) The catheter of claim 36 wherein the non-metallic material is a polymeric material.

38. (original) The catheter of claim 31 wherein the knit tubular member comprises a multifilament wire.

39. (original) The catheter of claim 38 wherein the multifilament wire comprises material selected from the group consisting of stainless steel, platinum, and nitinol.

40. (original) The catheter of claim 31 wherein the knit tubular member is formed from wire having a generally circular cross-sectional shape.

41. (original) The catheter of claim 40 wherein the wire has a diameter of about 0.3 mil. - 1.5 mil.

42. (original) The catheter of claim 31 wherein the knit tubular member comprises a first strand made from a first material and a second strand made from a second material.

43. (cancelled)

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44. (previously presented) The catheter of claim 58 wherein the outer tubular cover comprises a material selected from the group consisting of polyimide, polyamide, polyethylene, polypropylene, polyvinylchloride, Nylon, polyether block amide, fluoropolymers including PTFE, FEP, low density polyethylene, vinylidene fluoride, and their mixtures, alloys, copolymers, and block copolymers.

45. (previously presented) The catheter of claim 58 wherein the outer tubular cover comprises a polymer which can be heat-shrunk onto the knit tubular member.

46. (previously presented) The catheter of claim 58 wherein the outer tubular cover is extruded onto the knit member.

47. (previously presented) The catheter of claim 58 wherein the outer tubular cover is bonded on the knit member.

48. (previously presented) The catheter of claim 58 wherein at least one of the inner tubular liner and the outer tubular cover are radiopaque.

49. (cancelled)

50. (original) The catheter of claim 31 wherein the proximal segment has an inner proximal liner and an outer proximal cover.

51. (original) The catheter of claim 50 wherein the proximal segment further comprises a braid interposed between the inner proximal liner and the outer proximal cover.

52. (original) The catheter of claim 50 wherein the proximal segment further comprises a coil interposed between the inner proximal liner and the outer proximal cover.

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53. (original) The catheter of claim 31 wherein the knit tubular member extends into the proximal segment.

54. (previously presented) The catheter of claim 1 further comprising an outer tubular cover extending over the knit tubular member.

55. (previously presented) The catheter of claim 1 wherein the knit tubular member is in contact with the inner tubular liner.

56. (previously presented) The catheter of claim 1 wherein the knit tubular member is formed from a plurality of tightly knit interlocking loops.

57. (cancelled)

58. (previously presented) The catheter of claim 31 further comprising an outer tubular cover extending over the knit tubular member.

59. (previously presented) The catheter of claim 31 wherein the knit tubular member is formed from a plurality of tightly knit interlocking loops.

60. (cancelled)

61. (previously presented) The catheter of claim 1 wherein the up loops and down loops are the same size.

62. (previously presented) The catheter of claim 24 wherein the up loops and down loops are the same size.

63. (previously presented) The catheter of claim 31 wherein the up loops and down loops are the same size.